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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,287	11/14/2001	Richard W. Strobel	01-651	3691

7590 09/05/2003

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EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 09/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/991,287

Applicant(s)

STROBEL, RICHARD W.

Examiner

John J. Zimmerman

Art Unit

1775

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☒ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.

Claim(s) objected to: none.

Claim(s) rejected: 1-4,7-12,14-21,23-29,31-35 and 37-51.

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

John J. Zimmerman
Primary Examiner
Art Unit: 1775

Continuation of 2. NOTE: The proposed amendments add limitations (e.g. "consisting", hardness ranges and process limitations such as prohibiting electroplating methods) that would require reconsideration of the affected claims and would likely require reformulation of the rejections applied to the affected claims. Amendments to the claims introducing new issues of this scope will not be entered at this late stage in the prosecution of this application.

Continuation of 5. does not place the application in condition for allowance because: The Strobel declaration (Paper No. 9, received 8/25/03) has been carefully considered, but it is not clear on some issues. In particular, Strobel asserts that it is well known that solders such as those of Lupfer, have much lower hardnesses than coatings formed using the process of the present invention. The examiner notes, however, that no factual evidence on this issue was presented in the declaration. It is not clear how a 95%Sn-5%Ag "solder" would have a different hardness than a "coating" of the same composition. Particularly since the Lupfer reference also uses hot-dipping to form the Sn-Ag coating. While it is noted that different hardnesses may potentially result from different processing conditions, the Strobel declaration does not make clear how different hardness results might occur due to different processing conditions (e.g. hot dip bath temperatures) nor does it factually show that hardness results of any different processing conditions in Strobel would result in hardnesses outside of the claimed range. In view of the similar compositions, it is clearly applicant's burden to factually establish the hardness differences in the Sn-Ag coatings. Regarding Strobel's characterization of Brinkmann, it is not clear what process steps and parameters were used in creating the tested coatings and it is also not clear if applicant's original disclosure contains the concept that there is a patentable distinction in electrical conductivity between tin compositions containing 1% and 2% Ag. Regarding Strobel's characterization of the Arai Sn-Ag coatings, while it is noted that electroplating may initially produce chemical bonds, the reflow of the compositions during soldering temperatures would likely produce indistinct coatings from hot-dip coatings. In addition, Strobel asserts that electroplated coatings would include inorganic compounds, but offers no evidence that this very broad generalization applies to the coatings of Arai.